

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
14 July 2005 (14.07.2005)

PCT

(10) International Publication Number
WO 2005/062951 A3

(51) International Patent Classification⁷: **H04L 9/08**, 9/00

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(21) International Application Number:

PCT/US2004/043416

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(22) International Filing Date:

22 December 2004 (22.12.2004)

(81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

03293294.9 23 December 2003 (23.12.2003) EP

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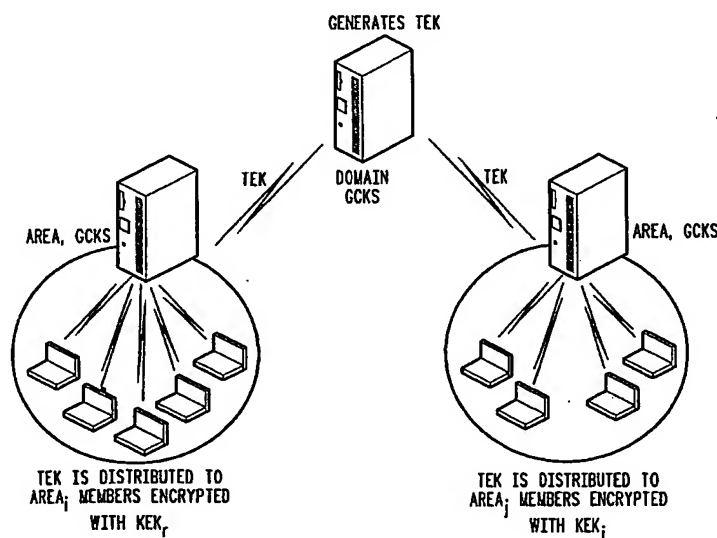
(84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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(54) Title: REKEYING IN SECURE MOBILE MULTICAST COMMUNICATIONS



(57) Abstract: A method of inter-area rekeying of encryption keys in secure mobile multicast communications, in which a Domain Group Controller Key Server (Domain GCKS) distributes Traffic Encryption Keys (TEK) to a plurality of local Group Controller Key Servers (local GCKS), and said local Group Controller Key Servers forward said Traffic Encryption Keys, encrypted using Key Encryption Keys (KEK_i, KEK_j) that are specific to the respective local Group Controller Key Server (local GCKS_i, GCKS_j), to group members, said local Group Controller Key Servers (GCKS_i, GCKS_j) constituting Extra Key Owner Lists (EKOL_i, EKOL_j) for group key management areas (areai, areaj) that distinguish group members (MM_i, MM_j) possessing Key Encryption Keys (KEK_i, KEK_j) and situated in the corresponding group key management area (areai, areaj) from group members (MM_{ij}) possessing Key Encryption Keys (KEK_i) that were situated in the corresponding group key management area (areai) but are visiting another area (areaj).



WO 2005/062951 A3



Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(88) Date of publication of the international search report:

17 November 2005